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Eing.  
13. Dez. 2001

Frist

Datum/Date  
13.12.01

Zeichen/Ref./Réf. 56 ND 01 L36	Anmeldung Nr./Application No./Demande n°./Patent Nr./Patent No./Brevet n°. 01117533.8-2207-
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Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire  
Denso Corporation

## COMMUNICATION

サーチレポート

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

abstract

title

The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract:

1



## REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 4 297 631 A (NICOL THOMAS ET AL) 27 October 1981 (1981-10-27) * the whole document * ----	1,4-7	H02J7/16 H02P9/38
D,X	WO 99 07064 A (BOSCH GMBH ROBERT ;KOSS THOMAS (DE); NASSWETTER GUENTER (DE)) 11 February 1999 (1999-02-11) * abstract; figures 1-4 * * page 3, line 18 - page 9, line 19 * ----	1,2	
D,X	US 5 376 876 A (BAUSER PHILIPPE B ET AL) 27 December 1994 (1994-12-27) * the whole document * ----	1	
A	US 5 449 999 A (EDWARDS A J) 12 September 1995 (1995-09-12) * abstract; figures 1,2 * * column 1, line 13 - column 4, line 53 * ----	1-6	
A	EP 0 510 527 A (MARELLI AUTRONICA) 28 October 1992 (1992-10-28) * abstract; figures 1-3 * * column 3, line 44 - column 5, line 44 * -----	1-6	<p>TECHNICAL FIELDS SEARCHED (Int.Cl.7)</p> <p>H02J H02P</p>
The present search report has been drawn up for all claims			
1	Place of search  MUNICH	Date of completion of the search  4 December 2001	Examiner  Braccini, R
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document			

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 11 7533

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

04-12-2001

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 4297631	A	27-10-1981	AU	533428 B2	24-11-1983
			AU	5635280 A	18-09-1980
			BR	8001551 A	11-11-1980
			DE	3060718 D1	30-09-1982
			EP	0016569 A1	01-10-1980
			ES	489602 D0	16-02-1981
			ES	8103507 A1	16-05-1981
			IN	152367 A1	31-12-1983
			JP	55127849 A	03-10-1980
			YU	69580 A1	31-08-1982
			ZA	8001370 A	31-12-1980
-----					
WO 9907064	A	11-02-1999	DE	19732961 A1	04-02-1999
			WO	9907064 A1	11-02-1999
			EP	0929933 A1	21-07-1999
			JP	2001501437 T	30-01-2001
			US	6147474 A	14-11-2000
-----					
US 5376876	A	27-12-1994	DE	69310818 D1	26-06-1997
			DE	69310818 T2	27-11-1997
			EP	0577994 A1	12-01-1994
			JP	7031078 A	31-01-1995
-----					
US 5449999	A	12-09-1995	DE	69508703 D1	06-05-1999
			DE	69508703 T2	07-10-1999
			EP	0713615 A1	29-05-1996
			WO	9534949 A1	21-12-1995
-----					
EP 0510527	A	28-10-1992	IT	1245477 B	20-09-1994
			DE	69213538 D1	17-10-1996
			DE	69213538 T2	13-02-1997
			EP	0510527 A1	28-10-1992
			ES	2091354 T3	01-11-1996
			JP	5122864 A	18-05-1993
			PL	167132 B1	31-07-1995
			US	5254935 A	19-10-1993
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